


PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number: 12732-068001
I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop AF, Commissioner for Patents, Box 1450, Alexandria, VA 22313-1450. _____ Date of Deposit _____ Signature _____ Typed or Printed Name of Person Signing Certificate	Application Number 09/925,512	Filed August 10, 2001
	First Named Inventor Hideto Ohnuma et al.	
	Art Unit 2812	Examiner Richard A. Booth
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a Notice of Appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record <u>37,640</u> (Reg. No.)</p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p>		
 _____ Signature _____ John F. Hayden Typed or printed name _____ (202) 783-5070 Telephone number _____ April 3, 2006 Date		
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below'.		
<input checked="" type="checkbox"/> Total of 4 pages are submitted.		

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Hideto Ohnuma et al. Art Unit : 2812
Serial No. : 09/925,512 Examiner : Richard A. Booth
Filed : August 10, 2001 Confirmation No.: 4989
Title : METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Pursuant to United States Patent and Trademark Office OG Notices: 12 July 2005 - New Pre-Appeal Brief Conference Pilot Program, a request for a review of identified matters on appeal is hereby submitted with the Notice of Appeal. Review of these identified matters by a panel of examiners is requested because the rejections of record are clearly not proper and are without basis, in view of a clear legal or factual deficiency in the rejections. All rights to address additional matters on appeal in any subsequent appeal brief are hereby reserved.

Claims 1, 4, 11, 14, 18, 21, 32, 33, 35, 36, 52, 53, 55, 58, 65-78 and 86-117 are pending, with claims 1, 4, 65, 72, 86, 93, 103 and 111 being independent. Claims 1, 11, 18, 32, 35, 52, 55, 61, 65-71, 86-92, 100-107, 109-115 and 117, including independent claims 1, 65, 86, 103 and 111, have been rejected as being unpatentable over Yamazaki (EP 1 003 223 A2) in view of Karr (U.S. Patent No. 6,534,425). Claims 4, 21, 33, 36, 53, 58, 72, 74-78, 93, 95-99 and 108, including independent claims 4, 72 and 93, have been rejected as being unpatentable over Yamazaki in view of Karr and further in view of Tabata (U.S. Patent No. 5,744,381). Applicant requests withdrawal of all of these rejections.

Applicant specifically asks the panel to review the issues highlighted below.

1. One of ordinary skill in the art would have had no motivation to combine Yamazaki and Karr in the manner set forth in the rejection.

Claim 1 recites, among other elements, forming a resist pattern on a conductive film by using one of a photomask having a diffraction grating pattern and a reticle having a diffraction grating pattern, such that a thickness of an edge portion of the resist pattern is smaller than a thickness of a middle portion of the resist pattern, and forming a gate electrode by etching using

the resist pattern, such that a thickness of an edge portion of the gate electrode is smaller than a thickness of a middle portion of the gate electrode. Recognizing that Yamazaki does not show a resist pattern having an edge portion with a thickness that is smaller than a thickness of a middle portion of the resist pattern, the rejection relies on Karr as describing use of a reticle with a diffraction grating to form a tapered photoresist pattern which can be transferred to an underlying structure through dry etching.

The rejection argues that it would have been obvious to modify Yamazaki so as to use the reticle pattern of Karr "because this is a suitable method in which to make a tapered gate electrode structure." Assuming for sake of argument that Karr's method would be suitable, **the mere "suitability" of the approach described by Karr would not have provided sufficient motivation to modify the process of Yamazaki, which involves a specific technique for forming a gate electrode having a tapered configuration.** In particular, Yamazaki, in paragraph [0209] and Fig. 26, states that the taper angle depends on the ratio of tungsten to resist, and, in paragraph [0210], further notes that a gate electrode having a desired taper angle may be obtained by using an ICP etching apparatus and by suitably determining the bias power density or reaction gas flow ratio. In view of this complete description of how to obtain a gate electrode having a desired taper angle, a person of ordinary skill in the art would not have been motivated to turn to the significantly different approach described by Karr. Accordingly, for at least this reason, the rejection of claim 1 and its dependent claims should be withdrawn, as should the rejection of independent claims 65, 86, 103 and 111, and their dependent claims.

2. The rejection does not assert any proper motivation to combine Yamazaki and Karr in the manner set forth in the rejection.

The final action asserts that the motivation to combine is clearly stated in the rejections and that suitability for an intended purpose is a proper motivation to combine references, citing MPEP 2144.07. The failure of the motivation set forth in the rejection is set forth above. In addition, MPEP 2144.07, which cites cases directed to the selection of a known material for its intended purpose or the replacement of mechanical brakes with hydraulic brakes, is not relevant to whether there would have been motivation to materially alter the process of Yamazaki in order to employ the reticle pattern of Karr.

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3. Tabata would not have motivated one of ordinary skill in the art to combine Yamazaki and Karr in the manner set forth in the rejection.

Tabata, which is cited for purposes of showing the use of a translucent mask, would not have motivated one of ordinary skill in the art to combine Yamazaki and Karr in the manner set forth in the rejection, and is not alleged to do so.

Applicant submits that all claims are in condition for allowance.

The fee in the amount of \$950 in payment of the appeal fee (\$500) and the two month extension of time fee (\$450) is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 4/3/06



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